

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A magnetic element comprising:
a rod-shaped sintered insulator of magnetic ferrite;
a conducting coil formed around the sintered insulator;
two external electrodes connected to the conducting coil,
wherein the insulator is made by firing mixed powder, main ingredients of the mixed powder including:

41 to 50 mol % of iron oxide when converted to Fe_2O_3 ;
3 to 16 mol % of zinc oxide when converted to ZnO ; and
41 to 55 mol % of cobalt oxide when converted to CoO .

Claims 2-3. (Cancelled)

4. (Currently Amended) An impedance element comprising:
a sintered insulator of magnetic ferrite;
a conducting coil provided in a meander shape or a spiral shape inside the magnetic insulator; and
two external electrodes connected to the conducting coil,
wherein the insulator is made by firing mixed powder, main ingredients of the mixed powder including:

41 to 50 mol % of iron oxide when converted to Fe_2O_3 ;
3 to 16 mol % of zinc oxide when converted to ZnO ; and
41 to 55 mol % of cobalt oxide when converted to CoO .

5. (Currently Amended) A common-mode noise filter comprising:
a ring-shaped core made of sintered magnetic ferrite;
two conducting coils wound in the same direction around the core; and
four external electrodes connected to the coils,
wherein the core is made by firing mixed powder, main ingredients of the mixed powder including:

41 to 50 mol % of iron oxide when converted to Fe_2O_3 ;
3 to 16 mol % of zinc oxide when converted to ZnO ; and
41 to 55 mol % of cobalt oxide when converted to CoO .

6. (Currently Amended) An antenna element comprising:
a cylindrical core made of sintered magnetic ferrite;
a conducting coil spirally wound around the cylindrical core; and
a threaded connecting section on one end of the core,
wherein the core is made by firing mixed powder, main ingredients of the mixed powder including:

41 to 50 mol % of iron oxide when converted to Fe_2O_3 ;
3 to 16 mol % of zinc oxide when converted to ZnO ; and
41 to 55 mol % of cobalt oxide when converted to CoO .

7. (Cancelled)

8. (New) A magnetic element of Claim 1, wherein a Q value reaches a maximum at a frequency of no less than 2 GHz.

9. (New) An impedance element of Claim 4, wherein a cut-off frequency is no less than 1.2 GHz.

10. (New) A common-mode noise filter of Claim 5, wherein a coupling coefficient is no less than 0.76.

11. (New) An antenna element of Claim 6, wherein radiation loss is no more than -2.0dB.